



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,697	12/27/2004	Ryuya Tachino	275854US6PCT	7279
22850 7590 12/22/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER NGUYEN, LINH THI				
ART UNIT 2627		PAPER NUMBER		
NOTIFICATION DATE 12/22/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/519,697

Applicant(s)

TACHINO ET AL

Examiner

LINH T. NGUYEN

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-41 and 43-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-41 and 43-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-29, 31-32, 34, 38-39, 41, 44-46, 48-49, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (US Publication Number 20030206509) in view of Van Woudenberg (US Patent Number 7215634).

In regards to claims 28 and 45, Lee et al discloses an optical recording medium and method in which write-once or rewrite operation of data can be performed with block including a group of data being as unit, wherein the buffer areas having a fixed length (Paragraph [0035]) for random access are respectively disposed before and after perspective blocks (Paragraph [0038]), wherein the fixed length buffer area disposed immediately before a respective of the blocks (Fig. 3B; run-in and run-out) includes a preamble (run-in) for signal processing, and plural synchronization patterns having distances and identification information that are different from each other are recorded at the preamble (Paragraph [0031]; "predetermined pattern" can be an identification information). However, Lee et al does not disclose an optical recording medium and method whereby when new block is recorded a start point for a buffer area before the new block is not fixed relative to an existing block preceding the new block and the new block is recorded in the state where the buffer area provided with respect to the block

and the buffer area provided with respect to existing block adjacent to the new block overlap with each other.

In the same field of endeavor, Van Woudenberg discloses an optical recording medium and method whereby when new block is recorded a start point for a buffer area (Fig. 7) before the new block is not fixed relative to an existing block preceding the new block (Column 9, lines 25-32) and the new block is recorded in the state where the buffer area provided with respect to the block and the buffer area provided with respect to existing block adjacent to the new block overlap with each other (Fig. 7). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the recording medium to have a fixed buffer as suggested by Lee et al to have a variable start point of a new block as suggested by Van Woudenberg. The motivation for doing so would have been to increase cyclability, i.e., the maximum number of direct-overwrite cycles (Column 9, lines 47-50).

In regards to claims 29 and 46, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses the optical recording medium and method, wherein recording unit block is constituted by block (data) and the buffer areas (PrA and G1) before and after the block (Fig. 7), and guard area (G1 or G2) or areas is or are provided at the rear portion of one recording unit block or at the rearmost portion of successive plural recording unit blocks (Fig. 7). The motivation is the same as claim 28 above.

In regards to claims 31, 41 and 48, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses the optical recording medium, apparatus and method, wherein the buffer area or areas disposed immediately before or immediately after block (Fig. 3), or immediately before and immediately after block includes or include guard area (G1 and G2) for overlap at the time of recording (Fig. 7), and signal pattern for automatic adjustment according to power of light source is recorded within the guard area (Fig. 6). The motivation is the same as claim 28 above.

In regards to claims 32, and 49, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately before block includes guard area for overlap at the time of recording (Fig. 7, Column 9, lines 25-32). The motivation is the same as claim 28 above.

In regards to claims 34, 44, and 51, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately after block includes postamble for time adjustment of signal processing (PoA), and guard area for adjustment of recording end position (G2), and signal pattern for detecting reproduction end of the block is recorded at the postamble (Fig. 7). The

motivation is the same as claim 28 above.

In regards to claim 38, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses an information processing apparatus (Fig. 1) adapted for performing recording or reproduction of information with respect to an optical recording medium in which write-once or rewrite operation of data can be performed with block including a group of data being as unit (Fig. 7), the information processing apparatus including data recording means for generating recording channel data in which buffer areas for random access are added before and after respective blocks to record the data onto an optical recording medium (Fig. 1 element 36), wherein when recording of new block is started with respect to a first block and a second block which have been already recorded (Column 9, lines 47-52), the block is recorded in the state where the buffer area disposed immediately before the block and the buffer area disposed immediately after the first block adjacent to the block overlap with each other (Fig. 7), and when recording of block is completed, the block is recorded in the state where the buffer area disposed immediately after the block and the buffer area disposed immediately before the second block adjacent to the block overlap with each other (Column 7, lines 25-32) . The motivation is the same as claim 28 above.

In regards to claim 39, Lee discloses a fixed length buffer area (Paragraph [0035]). However, Lee does not but Van Woudenberg discloses the information

processing apparatus as set forth in claim 11, wherein recording and reproduction are performed with recording unit block including block the buffer areas (PrA and G2 or PoA and G1) before and after the block being as processing unit (Fig. 7), and guard area or areas is or are provided at the rear portion of one recording unit block (Fig. 7), or at the rearmost portion of successive plural recording unit blocks at the time of recording of recording channel data (Fig. 6). The motivation is the same as claim 28 above.

Claims 30, 33, 35-37, 40, 43, 47, 50, and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Woudenberg '634 in view of Lee as claimed in claim 1 above and further in view of Van Woudenberg et al (US Patent number 6724707).

In regards to claims 30, 40 and 47, Lee discloses the optical recording medium, apparatus and method, wherein the fixed buffer area disposed immediately before block includes guard area (Fig. 2B, G1 or G2) for overlap at the time of recording (Fig. 3B). However, Lee and '634 does not discloses preamble for signal processing, and signal patterns for frequency pull-in of Phase Locked Loop (PLL) at the time of data reproduction and Auto Gain Control (AGC) are recorded at the guard area or the preamble.

In the same field of endeavor, Van Woudenberg et al discloses preamble for signal processing (Fig. 2, header area), and signal patterns for frequency pull-in of Phase Locked Loop (PLL) at the time of data reproduction and Auto Gain Control (AGC) are

recorded at the guard area or the preamble (Column 6, lines 42-54). At the time of the invention it would be obvious to a person of ordinary skill in the art to modify Lee and '634 optical recording medium to reproduce a signal patterns for frequency pull-in Phase Locked Loop and Auto Gain Control of Van Woudenberg et al. The motivation for doing so would have been to provide a medium which comprises a synchronization pattern to ensure optimized of an automatic gain control (Column 2, lines 43-47).

In regards to claims 33, 43 and 50, Lee discloses a fixed buffer area (Paragraph [0035]). However, Lee does not but '634 discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately after block includes postamble for time adjustment of signal processing, and guard area for adjustment of recording end position (Fig. 7). However, Lee and '634 does not but Van Woudenberg et al discloses a signal pattern for Phase Locked Loop (PLL) according to reproduction clock is recorded at the postamble (Column 7, lines 31-43). The motivation is as same as above.

In regards to claims 35, 36, 37, 52, 53 and 54, Lee and '634 does not but Van Woudenberg et al discloses the optical recording medium and method, wherein the signal pattern is repetitive pattern of 3T/3T/2T/2T/5T/5T (Column 5, lines 30-33). At the time of the invention it would have been obvious to a person of ordinary skill in the art to include '634 optical recording medium with a signal pattern of 3T/3T/2T/2T/5T/5T of Van

Woudenberg et al. The motivation for doing so would have been to ensure an optimized setting of AGC amplifier (Column 2, lines 44-47).

Response to Arguments

Applicant's arguments filed 8/29/08 have been fully considered but they are not persuasive. Applicant argues that Van Den Enden et al and Lee do not disclose "synchronization pattern and identification information that are different from each other are recorded at the preamble." However, Van Den Enden et al discloses sync pattern (Column 2, lines 42-46) and Lee discloses sync pattern and identification information that is different from each other are recorded at the preamble (Paragraph [0031]: "predetermined pattern" can be a identification information). Therefore, claims 28-41 and 43-54 are not patentable in view of Lee and Van Den Enden et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH T. NGUYEN whose telephone number is (571)272-5513. The examiner can normally be reached on 10:00am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN
December 8, 2008

/Thang V. Tran/
Primary Examiner, Art Unit 2627